

Manchester Code Converter

Features

- Compliant with ISO/IEEE 802.3 and Ethernet Rev. 1
- Works with the CS8005 and Intel 82586 LAN Controllers.
- Manchester Data Encoding/Decoding and Receiver Clock Recovery
- Loopback Capability for Diagnostics and Isolation
- Fail-Safe Watchdog Timer Circuit to Prevent Continuous Transmission.
- Transceiver Interface High Voltage (16V) Short Circuit Protection
- Low Power CMOS Technology with Single 5V Supply.

General Description

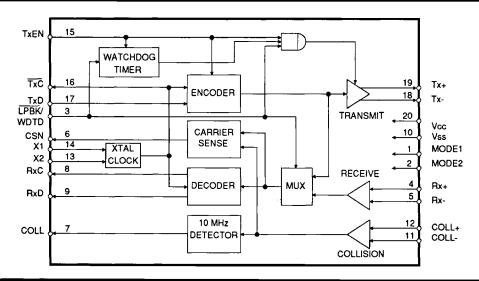
The CS8023A Manchester Code Converter provides the Manchester data encoding and decoding functions of the Ethernet Local Area Network physical layer. It interfaces to the CS8005 CSMA/CD Data Link Controller or to the Intel 82586 LAN Controller and any standard Ethernet transceiver as defined by IEEE 802.3 and Ethernet Revision 1.

The CS8023A is a functionally complete Encoder/Decoder including ECL level balanced driver and receivers, on board oscillator, analog phase locked loop for clock recovery and collision detection circuitry. In addition, the CS8023A includes a 25 millisecond watchdog timer, a 4.5 microsecond window generator, and a loopback mode for diagnostic operation.

Together with the CS8005 and CS83C92C, the CS8023A provides a high performance minimum cost interface for any system to Ethernet.

ORDERING INFORMATION:

Plastic DIP
CS8023A-P 20-Pin
CS8023A-L 20-Pin PLCC



Preliminary Product Information

This document contains information for a new product. Crystal Semiconductor reserves the right to modify this product without notice.

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